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ABSTRACT

Research has indicated that certain orienting activities help integrate new experiences with pre-existing cognitive structures. The content specificity hypothesis proposes that if the self-concept is distorted so that certain information is missing, then self-referencing that type of material will be ineffective. This notion of content specificity can be extended to "age specific" descriptors. This study examined age specificity in 20 college students and 20 elderly adults who rated the self- and other-descriptiveness of 80 trait adjectives. Following the rating process, subjects recalled as many of the adjectives as they could and completed the Self-Consciousness Questionnaire and the Need for Cognition Scale. The results replicated earlier findings that age specificity was most apparent for young adults, with elderly adults showing little preference for endorsing old trait items relative to youthful trait items. The results also indicated that the elderly showed no preference for elderly items over young items for shared traits, and no significant preference for the self-only items. Young subjects showed a preference for the young items over the elderly items. Findings suggest that young adults show a similarity of the self-image to the image of others while the elderly have a self-image that is more differentiated from their image of others. (NB)

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TRAIT DISTINCTIVENESS AND AGE SPECIFICITY IN SELF-REFERENT INFORMATION PROCESSING

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A number of recent experiments have indicated that certain orienting activities help integrate new experiences with pre-existing cognitive structures. In particular, an orienting judgment that refers new material to information in the self concept seems especially useful. These results stem from the research tradition initiated a decade ago by Rogers, Kuiper, & Kirker (1977). For example, deciding that an adjective describes oneself generally yields better retention of that adjective than would be the case for making a synonym judgment, and self-reference decisions are generally made more quickly than other decisions (cf. Greenwald & Pratkanis, 1984).

One line of research has examined the generality of such self-reference benefits. For example, Derry and Kuiper (1981) argued that if the self concept is distorted so that certain information is missing, then self-referencing that type of material will be ineffective. This content specificity hypothesis was supported when depressed subjects showed self-reference benefits only for depressed-content adjectives (e.g., "bleak," "gloomy") and showed no such benefits for nondepressed adjectives (e.g., "energetic," "amiable"). Thus it appeared that self-reference benefits accrued

specifically for content that was a part of the depressed subject's self concept (see also Markus, 1983).

This notion of content specificity can be extended to "age specific" descriptors (Mueller, Wonderlich, & Dugan, 1986), in that some adjectives are more commonly used to describe senior citizens than young adults (e.g., "wise"), and vice versa for other adjectives (e.g., "robust"). When young and elderly adults performed a self-reference task for these words, the results seemed to indicate that the self concept of young adults was more age specific than was the case for the self concept of elderly subjects. That is, elderly adults seemed to possess both young and elderly traits in their self concept, perhaps as a residual from having been young once (see also Brewer & Lui, 1984). The purpose of the present experiment was to further examine age specificity defined in this normative manner, and to integrate it with an idiographic definition of specificity.

Some traits seem to be more general in that they are true of a number of people as well as oneself (i.e., shared), whereas other traits are more specific to oneself (unshared). Trait distinctiveness can be identified by requiring subjects to judge each adjective twice, once for self-descriptiveness, and then again for other-descriptiveness (Mueller & Ross, 1984; Mueller, Ross, & Heesacker, 1984). Thus traits could be classified as (1) descriptive of both self and other, (2) descriptive of self but not others -- self-only, (3) descriptive of others but not self -- other-only, or (4) descriptive of neither. In this way we can identify not only whether a trait is a part of the self concept, but how central or distinctive the trait is for that individual.

The present experiment used this idiographic strategy with the adjectives that have been identified as normatively age specific, and sought to determine whether the self-only traits would show age specificity more clearly than the shared traits. More specifically, would the elderly begin to show some specificity if we examine just the most distinctive items?

Method

Subjects

The young adults were 20 college students enrolled in introductory psychology courses, participating in return for extra credit in their course. Twenty elderly subjects were recruited from the community and paid $5.00 for their participation. All were living at home and were in good general health at the time of the experiment. Various characteristics of the two groups are summarized in Table 1.

Insert Table 1 about here

Materials

The 80 test items were selected following a preliminary screening phase involving the evaluation of over 170 words by both young and elderly adults. The details of this screening are available elsewhere (Mueller, et al., 1986), but the primary consideration was that each trait seem to be more commonly used to describe people at one age level or the other. The 80 traits were grouped into four categories of 20 words each: elderly-likable, elderly-unlikable, young-likable, young-unlikable. Likability assignments were made by consulting

ratings of social desirability (e.g., Anderson, 1968). The complete list is presented in Table 2.

Insert Table 2 about here

Procedure

The rating phase involved the self- and other-descriptiveness decisions for the 80 trait adjectives. The 80 adjectives were randomly ordered for each subject, and presented one at a time on a video monitor controlled by a microcomputer, accompanied by one of two questions, "Describes you" or "Describes most people." Subjects indicated "yes" or "no" by pressing one of two keys on the keyboard. Subjects were instructed to answer rapidly, on the basis of a first impression.

Subjects made a self-descriptiveness judgment for all 80 words, then saw the same 80 words in a different order and made a decision for each one about other descriptiveness. The order of the targets (self, other) was counter-balanced across subjects.

After the words had been rated twice, there was an unannounced free recall test. Subjects typed in as many of the 80 words as they could remember, or wrote them out for the experimenter to type in.

The next phase of the experiment was the Self-Consciousness Questionnaire (Buss, 1980). This instrument consists of 23-items answered on a 5-point scale, and provides an estimate of private self-consciousness (proneness to examine motives, moods, etc.), public self-consciousness (monitoring of appearance to others), and social anxiety (arousal in the presence of others). Self-awareness is

sometimes related to the magnitude of self-reference benefits (cf. Agatstein & Buchanan, 1984), and elderly subjects are generally somewhat lower in self-awareness as measured by this scale (Mueller, Wonderlich, & Dugan, 1986), as also was found here (see Table 1).

The final phase of the experiment was the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984). This questionnaire assesses the extent to which an individual engages in and enjoys effortful cognitive activity. There are 18-items, such as, "I really enjoy a task that involves coming up with new solutions to problems," each answered on a 5-point scale. It was not known how this component changes with aging, if at all, so this inventory was included here for exploratory purposes. As Table 1 shows, young and elderly adults showed no apparent difference on this scale.

Results

Descriptiveness Judgments

The primary data relevant to content differences are the number of endorsements ("yes" responses). In this case, the number of shared adjectives (i.e., those identified as descriptive of both self and other) were tabulated, then the number of unshared or distinctive traits (i.e., those identified as descriptive of self only), and these data were analyzed in a Group (young, elderly) by Item Age (young, elderly) by Affect (likable, unlikable) by Subtype (both, self only) layout, with repeated measures on the last three factors.

These data indicated several things. For example, the college students endorsed more items overall than the older adults (*M*s = 44.3 and 38.0). Furthermore, the college students endorsed about the same number of young and elderly traits (*M*s = 21.6 and 22.8), whereas the

older adults endorsed more elderly traits than youthful traits (Ms = 20.7 and 17.3) -- note the left panel of Figure 2.

However, the result of greatest interest here was a significant triple interaction of Group X Item Age X Subtype, F (1,39) = 8.40, p < .006, which is plotted in Figure 1. The importance of the interaction is in two components. First, consider the two lower lines in Figure 1: the distinctive self-only items showed the same pattern for item age (namely, old items more often seen as distinctive) and for subject age (namely, no significant group difference in distinctive endorsements). Second, note the top two lines in Figure 1: the items seen as less distinctive (endorsed "both") indicated no significant item-age difference for older adults, but the college students endorsed significantly more young items than old items.

Thus these results replicate earlier findings (Mueller et al., 1986) in that age specificity was more apparent for the college students. These data also indicate that this age specificity is limited to traits judged to be shared, and not those that are more individualistic. Furthermore, there was a significant four-way interaction, F (1,39) = 5.98, p < .02, which indicated that the results in Figure 1 (top two lines) held only for likable traits. That is, college students showed this age specificity only for desirable young traits.

Insert Figure 1 about here

Latencies

The decision speed for self descriptiveness judgments is shown in the center panel of Figure 2. There was a significant Group X Item Age interaction, F (1,39) = 4.49, $p < .05$, as college students showed no difference for the young and old items (Ms = 1330 and 1392 msec), whereas the older adults were faster for the old items than for the young items (Ms = 2468 and 2867 msec), with elderly subjects showing the usual overall deficit in response speed (cf. Kausler, 1982, and Salthouse, 1982).

Insert Figure 2 about here

There also was a significant Group X Subtype interaction, F (1,39) = 4.62, $p < .04$, as college students were nonsignificantly faster on the self-only items relative to the both items (Ms = 1298 and 1420 msec), whereas the older adults were significantly slower on the self-only items (Ms = 2819 and 2508 msec). Stated differently, older adults were slower than the college students on both subtypes, but moreso on the self-only items.

Probability of Recall

The recall data indicated no significant effects for subject age nor item age (Fs < 1). Furthermore, the Group X Item Age interaction (right panel of Figure 2) also failed to reach significance ($F < 1$). The older adults tended to recall more self-only items than both items (Ms = 32.1% and 21.6%), whereas the college students showed no difference (Ms = 29.4% and 29.2%), but the Group X Subtype interaction was only marginally significant, F (1,39) = 2.92, $p < .10$.

Ancillary Results

The individual differences measures are shown in Table 3. It is clear that private self consciousness was essentially uncorrelated with any performance measure for both young and elderly adults. On the other hand, need for cognition was positively correlated with recall for both young and old adults, at least for the distinctive traits. Need for cognition was not correlated with either private or public self consciousness ($p > .05$), but it was inversely correlated overall with social anxiety, r (40) = -.40, $p < .01$, particularly for the elderly subjects, r (20) = -.62, $p < .005$.

Insert Table 3 about here

Discussion

This experiment was conducted to investigate age specificity in the self concept of young and elderly adults. Previous results had indicated age specificity was most apparent for young adults, with elderly adults showing little preference for endorsing old trait items relative to youthful trait items.

The present data replicated this general result, and indicated that the elderly show no preference for elderly items over young items for shared traits, and no significant preference for the self-only items. The only other evidence of age specificity for the elderly adults was that elderly adults made faster decisions about the elderly items, regardless of whether the items were judged both or self-only in terms of distinctiveness.

The young adults in the present study again showed a preference for the young items over the elderly traits, but this was more apparent for the shared traits ("both") than for the more distinctive self-only traits, and moreso for likable than unlikable items. This may indicate similarity of the self-image to the image of other people for young adults, whereas the elderly have a self-image that is more differentiated from their image of other people.

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Table 1

Subject Characteristics by Age, with Standard Deviations in Parentheses

	Elderly	Young
Age in Years	73.4 (7.4)	18.1 (0.8)
Public Self-Consciousness*	20.9 (3.4)	26.7 (5.3)
Private Self-Consciousness*	28.0 (6.0)	33.20 (7.1)
Social Anxiety	14.7 (4.7)	17.3 (4.7)
Need for Cognition	57.8 (12.0)	60.9 (11.1)

* $p < .05$

Table 2

Trait Adjectives by Age Specificity and Likability

Positive		Negative	
Young	Elderly	Young	Elderly
active	admirable*	arrogant	bossy
ambitious	composed	careless	cranky
attractive	dignified	changeable	depressed*
bold	distinguished	egocentric*	eccentric
bright	experienced	immature	fearful
confident	gentle	impatient	feeble
curious	honorable*	impulsive	forgetful
eager	kindly	inconsiderate	ill
energetic	mature	inexperienced	inactive
enterprising	noble*	lazy	lonely
enthusiastic	patient	naive	moralistic
healthy	peaceful	noise	needy
hopeful	realistic	reckless	repetitive
idealistic	respected	rude	rigid
inquisitive	sensible*	sloppy	slow
optimistic	thorough	spoiled	suspicious
persistent*	tolerant	superficial	tired
quick	tranquil	unreliable	useless
strong	wise	violent	weak
vigorous	worldly*	wasteful	withdrawn

* Items not classified similarly by elderly subjects.

Table 3

Correlations with questionnaire data, by subject age (n = 20), pooled over item age and likability.

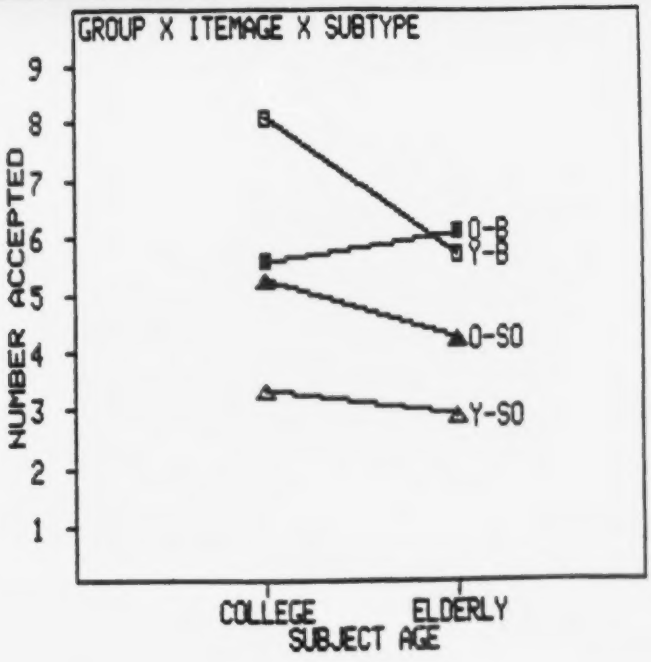
	Endorsements		Latency		Recall	
	Both	Self-Only	Both	Self-Only	Both	Self-Only
College Students						
Social Anxiety	.04	-.09	.22	-.01	-.08	-.11
Private SC	.31	.15	.21	-.12	-.21	-.15
Public SC	.43*	.22	-.01	-.20	-.01	-.29
Need for Cog.	-.41	.30	.13	.09	.19	.52*
Elderly Adults						
Social Anxiety	-.30	.31	-.23	-.25	-.17	.15
Private SC	-.15	.09	.24	.11	.07	.41
Public SC	-.33	.30	-.30	-.26	-.11	.08
Need for Cog.	.04	-.23	-.16	-.07	.45*	.49*

* $p < .05$

Figure Captions

Figure 1: Number of items endorsed as descriptive of both self and other (B) or self only (SO), by Subject Age and Item Age (O = old, Y = young), collapsed over likability.

Figure 2: Endorsements, decision speed, and probability of recall by Subject Age and Item Age, collapsed over subtype and likability.



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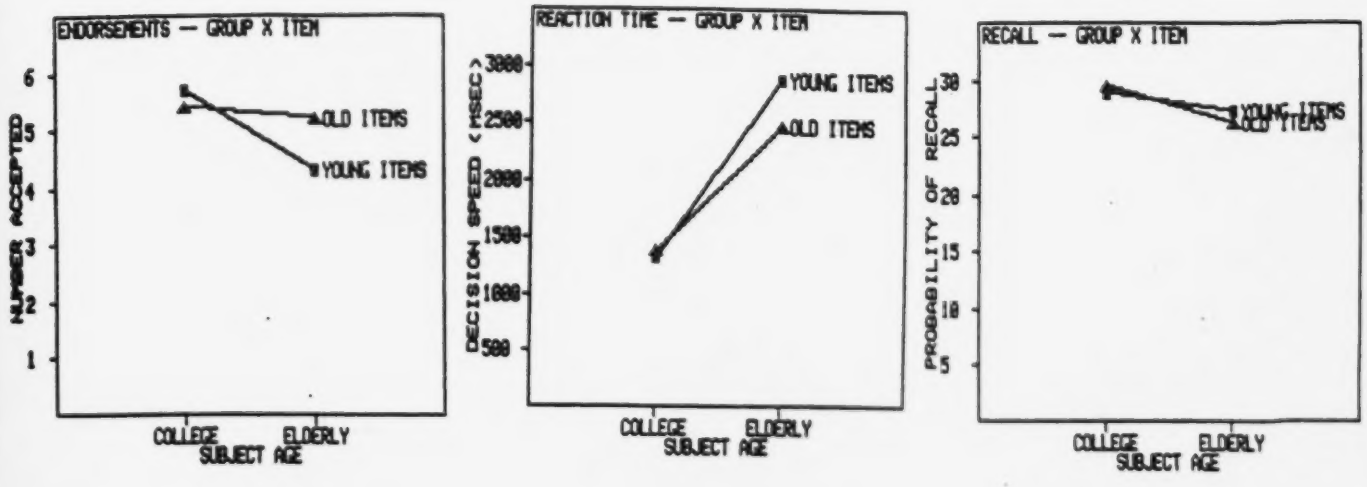

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